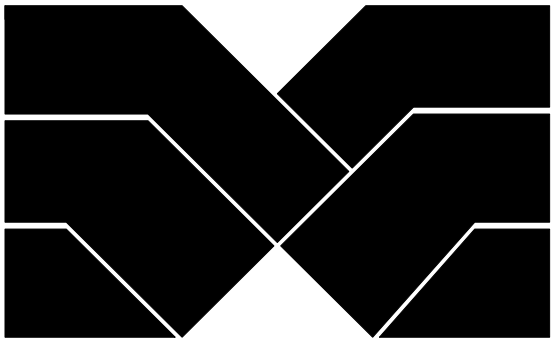

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Congestion Manipulation in ISO California

Testimony Before the Select Committee to Investigate Price Manipulation of the Wholesale Energy Market

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Summary

On May 6, 2002 FERC released three memos that gave an overview of a family of schemes designed to take advantage of the California market. While some of these schemes were simply arbitrage, others involved falsifying filings at the ISO and collecting congestion fees from imaginary transactions. Analysis of detailed trading materials, including instructions on the entry of these transactions into Enron's computers and daily transaction logs, shows that Enron had developed a wide variety of methods for creating the illusion of transactions that could alleviate transmission congestion at the California ISO. As with Enron's other activities, these schemes used evocative names like Deathstar, Black Widow, Big Foot, Cong Catcher, Forney's Perpetual Loop, and Red Congo.

Stripped of their complexities, these schemes are simply a modern version of check kiting – a way of collecting money from unsuspecting victims be creating a cycle of transactions without underlying economic or engineering substance.

Enron used a variety of counterparties in these schemes. PGE is mentioned repeatedly. Washington Water Power (Avista) and PacifiCorp are also present as participants. California transmission outside of the knowledge of the California ISO is contributed by Redding, NCPA, and LADWP.

Evidence from other sources leads to the suspicion that such tools may have been used to create congestion as much as they were used to alleviate it. If so, this will go a long way to explain inconsistencies in the data from January 2001 that shows that while the California ISO believed that it was shipping energy north, the Bonneville Power Administration shows that net energy flows were going south. The California ISO needs to be encouraged to make transmission schedules, congestion

payments, and actual flows from January 2001 public so that the question whether these schemes may have caused the blackouts during this period can be investigated.

Deathstar

Deathstar is a generic name for a family of schemes that are designed to capture ISO congestion payments through imaginary transactions. The name first came to general attention through the December 6, 2000 memo by Christian Yoder and Stephen Hall. Their description on pages 4 and 5 is hardly detailed. They describe a scheme to ship energy between COB and "Lake Mead". As with other details in the Yoder/Hall memo, the description appears to be hasty and superficial.

The detailed materials authored by Michael Driscoll on April 5, 2000 describe how the hints in the Yoder/Hall memorandum actually worked. The following operating details are from his email:

> Project Deathstar has been successfully implemented to capture congestion relief across paths 26, 15 & COI .
>
> We input the deals as follows :
> 1 EPMICAL POOL MEAD230 / MALIN
> 2. ONE DEAL TICKET, A BUY/RESALE WITH WASHINGTON WP SELLING AT MALIN, REPURCHASING AT PGE SYSTEM, (PAYING WWP $1 DIFFERENTIAL)
> 3. SELL INDEX FWD TO PGE AT PGE SYSTEM. INPUT AT DOW JONES MID C INDEX.
> 4. BUY INDEX FWD FROM PGE AT JOHN DAY AT DOW JONES MID C INDEX PLUS .90
> 5. USE EXISTING PGE CONTRACT #146517 FOR TRANSMISSION FROM JD/MALIN
> 6. USE EXISTING LADWP TRANSMISSION #292672 FROM MALIN>MEAD230
>
> Everything will link up, with the buy from PGE(JD) on top, all the trans and buy/resells in the middle, and the sell to PGE(system) at the end[1]

These are instructions on how to enter a Deathstar transaction into Enron's scheduling computer program. Much of the scheduler's jargon may seem bizarre to those new to the industry. Much of the shorthand involves instructions on the entry of the transaction into Enpower (Enron's California transaction software) or CAPS (software to submit schedules to the ISO.)

The six steps translated into normal English are as follows:

1. File a schedule over ISO transmission paths from Mead to the California Oregon Border.[2]
2. Washington Water Power (Avista) sells at COB and repurchases at Portland.

3/4. Enron buys and sells based on Dow Jones Mid C Index.

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[1]The FINAL PROCEDURES FOR DEATH STAR, disregard the other 2 emails, Michael Driscoll, May 5, 2000.

[2]Malin is the physical location of the substation that connects PGE and BPA's 500 kV lines with California.. Mead (not "Lake Mead") is a market hub in Nevada.

5. PGE transfers the power to John Day.
6. Transfer the power back to Mead over LADWP existing transmission rights on the ISO system.

This transaction will increase the ISO's feeling that energy is being exported out of California to the Pacific Northwest.[3] As designed, this will "capture" congestion fees at Path 15, Path 26, and the California Oregon Intertie. For this to work, power flows must be generally southward – a standard situation in May.

Red Congo

Red Congo is one of several creations of John M. Forney. Mr. Forney is now an employee of UBS Warburg in Houston. Red Congo has the following steps:

1 SC trade with WAMP on behalf of Redding . Don't adjust load.
2. NF export with sale to PACW at $20.
3. Redding buys energy from PACW at COB at $21
4. Redding uses their ETC (existing transmission capacity) to take energy from Cob to Tracy, where we traditionally transact via SC trade.[4]

As above, Mr. Forney's notes can be translated as schedule trade through WAPA. Redding's transactions are with PacifiCorp (west) at Malin and the resulting energy is "delivered" to Tracy. The map on the next page shows the geography of this arrangement.

This virtual loop is similar in concept to the descriptions of Deathstar and the Perpetual Loop. Unlike these, the loop only provides an opportunity to relieve congestion on the CACI.

Red Congo is unusual at this point because PacifiCorp has provided corroboration in its affidavit to FERC concerning Enron's trading schemes.[5]

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[3]An interesting facet to each of these schemes is that Enron was certain that the ISO would not connect the dots in these transactions. This is all the more surprising since the ISO schedules both sides of the transaction. Only the portions at Mead and within Oregon are outside of the ISO's scheduling.

[4]Undated email from John M. Forney.

[5]87. Company personnel recall that the City of Redding asked PacifiCorp in or about April 2000 if it would assist it from time to time to move energy over the COTP in northern California that connects at the Captain Jack substation. Since that proposal was for a common industry transaction, PacifiCorp agreed to engage in the transaction for a small fee that was subject to change by PacifiCorp. Company personnel do not recall being aware in advance that Enron would be part of such transactions, or that PacifiCorp would be part of what is described in the Enron Email as a "virtual loop." Nor do they recall being "on board" with a transaction that was designed to benefit Enron.

88 . The Company has located two transactions that appear to have been made with the City of Redding according to the agreement described above. Company personnel recall that the City of Redding appears to have discontinued use of PacifiCorp's service when PacifiCorp slightly

From Pacific's comments, Enron and Redding approached other third parties to provide support for this scheme as well.

Conclusions

In its settlement with the California Power Exchange in June of 2000 Enron agreed to avoid such schemes in the future. During the same month that this settlement was signed by Greg Whalley, now the director of UBS Warburg's energy trading unit, Whalley's staff issued the design of Deathstar.

1. Enron's traders created a number of schemes designed to create imaginary schedules eligible for ISO congestion payments.

2. These schemes, both in their scale and in their number, indicate that traders had the ability to distort the ISO's transmission operations throughout the State of California.

3. These schemes included numerous counterparties. PGE was a primary player. Other Pacific Northwest utilities were involved. California utilities such as LADWP and NCPA appear to have played an important role.

4. The ability of the protagonists to manipulate the ISO system opens the question whether critical operations during January 2001 suffered from these manipulations. Data inconsistencies between the ISO and the Bonneville Power Administration seem to support this hypothesis.

5. It is critical for data on actual flows, schedules, and payments to be released so that the scale of the problem can be investigated. Continued secrecy will tend to protect the perpetrators of these schemes over the interest of consumers.

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increased its fee as a commercial matter. Attached hereto as Exhibit 8A are responsive emails. Attached hereto as Exhibit 8B are copies of the long-term power purchase agreements between PacifiCorp and City of Redding. Attached hereto as Exhibit 8C are trading logs dated May 6, 2000 and June 22, 2000, involving transactions with the City of Redding.

Response of Pacificorp to the Commission's Data Request, May 8, 2002, page 23.